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EXAMINER	
KIANNI, KAVEH C	
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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/809,298
Filing Date: March 25, 2004
Appellant(s): SABBATINO, SALVATORE

Paul D. Greeley
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 12/04/2006 appealing from the Office action mailed 5/31/06.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

The real party in interest is Avago Technologies Fiber IP (Singapore) PTE, LTD.

Ownership by Avago is established by assignment document recorded for this application on May 25, 2006 on Reel 017675, Frame 0199.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is incorrect. A correct statement of the status of the claims is as follows:

This appeal involves claims 1, 2, and 7-9.

Claims 3, 4 and 6 are allowed.

Claim 5 has been canceled.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is deficient. 37 CFR 41.37(c)(1)(v) requires the summary of claimed subject matter to include: (1) a concise explanation of the subject matter defined in each of the independent claims involved in the appeal, referring to the specification by page and line number, and to the drawing, if any, by reference characters and (2) for each independent claim involved in the appeal and for each dependent claim argued separately, every means plus function and step plus function as permitted by 35 U.S.C. 112, sixth paragraph, must be identified and the structure, material, or acts described in the specification as corresponding to each claimed function must be set forth with reference to the specification by page and line number, and to the drawing, if any, by reference characters. The brief is deficient because The claimed invention correctly relates to an absorber body arranged to at least cover partially at least one lead of an electrical subassembly and optical subassembly having associated electrical connection.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is substantially correct. The changes are as follows: over Fujieda et al. (US 2004/0146452).

(7) Claims Appendix

A substantially correct copy of appealed claims 1-4 and 6-9 appears on page 8-9 of the Appendix to the appellant's brief. The minor errors are as follows: The correct claims on appeal are claims 1, 2 and 7-9 since claims 3, 4 and 6 have been already allowed.

(8) Evidence Relied Upon

2004/0146452	Fujeida et al.	7-2004

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 2 and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujieda et al. (wherein after referred to as "Fujieda") (US 2004/0146452).

Regarding claims 1, Fujieda teaches an arrangement (shown in at least fig. 8 and 11) including: an electrical subassembly (see at least figures 8 and 11, item 11), an optical subassembly (see at least 13,5,9, 10; wherein item 10 is a laser diode emitting light) said electrical subassembly 11 and said optical subassembly (at least 13,5,9, 10) having an associated electrical connection including at least one electrical wire extending therebetween (see at least parag. 0062, 1st 10 lines; also shown in at least fig. 11, item electrical wire extending from a laser driver circuit 11 to laser device 10, also wirings between optical elements such as between PD 19 and 20/18 and/or

wirings between optical elements and main circuit board 14), and at least electrically non-conductive absorber body arranged to at least partly cover said at least one electrical wire (see at least parag. 0020 and 0012, 0015 ; wherein, absorption materials such as rubber and/or resin and/or polymer are electrically non-conductive).

However, Fujieda does not specifically state that the above electrical wire(s) is/are electrical lead(s). It is obvious/well-known to those of ordinary skill in the art when the invention was made that electrical wire(s) for electrical connection and/or transmitting/receiving radio signals are/known-as electrical leads since such electrical configuration would provide optical transmission or reception, automated tollgate, and high frequency communication equipment (see parag. 00002).

Regarding claims 2, and 7-9, Fujieda further teaches wherein said electrical connection includes a wire frame comprising a plurality of said electrical wires, said absorber body arranged to extend over said wire frame (see at least fig. 11, item 11 and/or 18 and/or 14 each consisting of electrical wires, see also abstract and see also figures 5 and 10 and parag. 0058); wherein said electrical connection is a radio frequency electrical connection between said electrical Subassembly and said optical subassembly (shown in at least fig. 12, item 27/28, also at least abstract); wherein said absorber body is selected out of the group consisting of magnetically loaded, iron loaded, ferrite loaded or dielectrically loaded materials (at least parag. 0016-0017) and/or comprised of a material selected from the group consisting of silicon, urethane,

vinyl plastic and silicon rubber (see at least parag. 0007); wherein said absorber body is in the form of a sheet material (see at least figures 5-6 item absorption sheet 1)**(10) (10)**

(10) Response to Argument

In page 3, 4th through page 6, Applicant alleges that Fujieda does not teach every element of claim 1, in particular "at least electrically non-conductive absorber body arranged to at least partly cover said at least one electrical wire" by reference to Figure 11 and citation of particular parag. The Examiner responds that as stated above Fujieda teaches all limitations of the claimed invention in claim 1; In particular, Fujieda teaches an electromagnetic wave abruption material such as resin, rubber and polymeric compounds that cover electrical circuits including electrical leads/wiring (see at least parag. 0012, 0015 and 0020; wherein, absorption materials such as rubber and/or resin and/or polymer are electrically non-conductive).

With regard to Applicant's reference to figure 11 and arguments that non-conductive absorber body not taught by Fujieda, the Examiner refers the following excerpts by Fujieda:

[0020] (1)A printed wiring board in which all or a part of at least one of surfaces of said wiring board, one wired surface and the other the reverse surface thereof which has no circuit wiring, is covered with a layer of direct coating or a sheet-formed film each comprised of the electromagnetic wave absorption material by the present invention.

[0012] The inventors of the present invention found that an electromagnetic wave absorption material comprised of a dispersions of multi-layer hollow globule of carbon mixed into electrical insulating organic material has a far more excellent performance as the electromagnetic wave absorption material

available for use in millimeter wave region compared to an electromagnetic wave absorbing material relying on dielectric loss, i.e. a dispersions of carbon-based substance, such as carbon black particulate, graphite, coke, carbon microcoil, and carbon nanotube, mixed into electrical insulating organic material like Rubber and resin. Since said multi-layer hollow globule of carbon or a multi-layer hollow globule of carbon existing in a natural schungite ore (hereinafter referred to as a schungite carbon) is contained in natural schungite ore, the use such material for the electromagnetic wave absorption material sees little difficulty. Particularly, the present invention is devised based on the finding that such globule has a high absorption property in millimeter wave region of which frequencies are 30 to 300 GHz.

[0015] The electromagnetic absorption material in the present invention is preferred to be a dispersions mixed into a substance that has a higher electrical resistance than that of multi-layer hollow globule or the schungite carbon. In this dispersing, the quantity of the multi-layer hollow globule and the schungite carbon is preferred to be in a range of 5 to 50% of the weight of such high-resistance substance. This high-resistance substance is preferred to be selected among from rubber, insulation high polymer, and insulating inorganic material.

The following excerpts are in reference to Figure 11, includes circuit wirings and absorption material

[0067] FIG. 11 is a plan view of the optical transmission-reception module in which an optical transmission module and an optical reception module are formed on the circuit board 12. An optical transmission-reception module 17 works both as an optical transmission module and an optical reception module. The optical transmission part is comprised of the jacketed optical fiber 9, the ight guide 13, the LD 10, the transmitter circuit 11, and the circuit board 12. The transmitter circuit is comprised of an LD driver to drive a laser, a laser output control unit, and a flip-flop circuitry. The optical reception part is comprised of the jacketed optical fiber 9, the light guide 13, a PD 19, a receiver circuit 18, and the circuit board 12. The receiver circuit is comprised of the PRE-IC that has a pre-amplifying function, the CDRLSI composed of a clock extraction part and an equalizing amplifier, a SAW narrow band

filter, and an AOD bias controlling circuitry. In practice, these configuration is accompanied by lead-frames and wires, which are omitted in the figures however.
[0070] According to the present embodiment, it becomes practicable to provide equipment acceptable for use in a high speed telecommunication network, such as an optical transmission module, an optical reception module, or an optical transmission-reception module composed of an optical transmission unit and an optical reception unit; thanks to their capability rendered from the absorbing material to suppress internal noise interference and noise emission to outside, to achieve small-sizing and weight-reduction, to work under high speed transmission, and to have high sensitivity.

Clearly, as stated by Fujieda the electromagnetic wave absorption material is non-conductive materials, such as polymer and rubber/resin compounds, which covers electrical components including at least partially electrical leads/wirings.

Furthermore, the examiner states that if with an assumption the above absorber-body taught by Fujieda as a film/coating over the circuit wiring was electrically conductive material then there would be a short circuit and the communication system of Fujieda would not work. Thus, the material has to be non-conductive to avoid short circuit.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

K. CYRUS KIANNI
PRIMARY PATENT EXAMINER

Kaveh Cyrus Kianni 2/16/2007

Conferees:

Frank Font

Georgia Epps